

REMARKS

Claims 1, 3, 4, 6, 7, 9 and 11-14 are pending.

Claims 1, 3, 4, 6, 7, 9 and 11-14 are rejected.

Claim 1 is amended.

Claims 15-17 are new.

Claims 1, 3-4, 6-7, 9 and 11-17 are now pending.

Amended Claim 1

Claim 1 is amended to clearly require a dual dosage technique. The second flocculant is added and mixed directly into the thickened suspension. Support for this amendment may be found on page 14, within section v).

New claims 15-17

Claims 15 and 16 are supported by the disclosure on page 7, lines 1-12.

Claim 17 is supported by the disclosure on page 6, lines 17-24.

No new matter has been added.

35 USC 102(b)

Claims 1, 3, 4, 6, 7, 9 and 11- 14 are rejected under 35 USC 102(b) as being anticipated by Soresen, US 5,846,433.

The examiner believes Soresen to disclose a process of thickening and dewatering a sewage sludge suspension utilizing a second flocculant comprising dry particles as recited in the instant claims.

Examiner refers applicants to co. 3, lines 15-22 of Soresen which examiner believes teach the use of a thickening process to produce a thickened sludge and a mechanical dewatering process to produce a cake.

Amended claim 1 now reads:

1. A process of dewatering an aqueous suspension in which the aqueous suspension is sewage sludge comprising

a) dosing the suspension with a flocculating amount of a first flocculant in which the first flocculant is a cationic organic polymer to form a thickened suspension,

b) adding and mixing into the thickened suspension formed in step a) a dewatering amount of a second flocculant in which the second flocculant is a cationic polymer having an intrinsic viscosity of at least 3 dl/g,

and

c) subjecting the thickened suspension to mechanical dewatering to form a cake, characterised in that the second flocculant of step b) comprises a water-soluble or water swellable polymer that is mixed into the suspension in the form of (i) substantially dry polymer particles or (ii) an aqueous composition comprising dissolved or hydrated polymer having a polymer concentration of at least 2% by weight.

Claim 1 now requires an explicit step b) wherein the second flocculant is added and mixed into the thickened suspension formed in step a).

Sorensen does not disclose this additional step. Accordingly the anticipation rejection is overcome.

35 USC 103(a)

Claims 1, 3, 4, 6, 7, 9, and 11-14 are rejected as being unpatentable over Sorensen et al in view of Ghafoor et al US 6001920.

Examiner explains the claims differ from Sorensen et al by reciting the second flocculant has a specific polymer concentration by weight. Ghafoor et al. disclose that it is known in the art to utilize a flocculant composition having a concentration of 5% by weight, to aid in flocculating sludge suspensions. Thus according to the examiner it would be obvious to modify the process of Sorensen by utilizing the recited concentration in view of the Ghafoor et al. teaching.

Applicants respectfully disagree:

- Sorensen makes no suggestion to add and mix a second flocculant to the thickened suspension presently claimed in step b).

- Furthermore, Ghafoor et al does not disclose adding and mixing into the thickened suspension formed in step a) a dewatering amount of a second flocculant as presently claimed. Accordingly Ghafoor does not make up for the deficiencies of Sorensen.

Thus the combination of Sorensen and Ghafoor do not suggest all the steps presently claimed and claim 1 and all dependent claims are not rendered obvious over the disclosure of Sorensen et al in view of Ghafoor et al.

Double Patenting Rejection


Applicants wish to put off the filing a terminal disclaimer until the other issues are resolved and applicants know the final state of the claims. At that time, applicants can better evaluate the suitability of filing a terminal disclaimer.

Reconsideration and withdrawal of the rejection of claims 1, 3-4, 6-7, 9 and 11-14 is respectfully solicited in light of the remarks and amendments *supra*.

Since there are no other grounds of objection or rejection, passage of this application to issue with claims 1, 3-4, 6-7, 9 and 11-17 is earnestly solicited.

Applicants submit that the present application is in condition for allowance. In the event that minor amendments will further prosecution, Applicants request that the examiner contact the undersigned representative.

Respectfully submitted,


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